UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,410	10/27/2003	Sixten Johansson	81757.0039	9634

			EXAMINER .
466 7590 04/16/2007			TRAN, PHUC H
YOUNG & THOMPSON		ART UNIT	PAPER NUMBER
745 SOUTH 23RD STREET		2616	
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ARLINGTON, VA 22202			

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

		Application No.	Applicant(s)
Office Action Summary		10/695,410	JOHANSSON, SIXTEN
		Examiner	Art Unit
		PHUC H. TRAN	2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>27 October 2003</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-18</u> is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-18</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☐ All   b)☐ Some * c)☒ None of:

  1.☐ Certified copies of the priority documents have been received.

  2.☐ Certified copies of the priority documents have been received in Application No. _____.

  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date <u>7/26/04,9/14/04,3/1/05</u>.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

Priority

1.   Acknowledgment is made of applicant's claim for foreign priority based on an application

filed in Finland on 10/24/2002. It is noted, however, that applicant has not filed a certified copy

of the 20021894 application as required by 35 U.S.C. 119(b).

Drawings

2.   Figure 1 should be designated by a legend such as --Prior Art-- because only that which is

old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR

1.121(d) are required in reply to the Office action to avoid abandonment of the application. The

replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR

1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted

by the examiner, the applicant will be notified and informed of any required corrective action in

the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3.   Claim 17 is objected to under 37 CFR 1.75(c) as being in improper form because a

multiple dependent claim 15-16. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

Claims 1-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed

to non-statutory subject matter. Claims recite a method and a system, respectively. These claims

appear to include a judicial exception, namely, an abstract idea. Note that the method steps

recited in claim and the elements recited in claims are disclosed by specification. Since there are

no practical applications claimed, i.e., no physical transformation taken place, nor a useful,

concrete and tangible result being produced, the claims are non-statutory.

Claim 18 is rejected under 35 U.S.C. 101 because the claimed invention is directed to

non-statutory subject matter. Claim 18 is drawn to functional descriptive material embodied on a

computer program (i.e., "data structures and computer programs which impart functionality

when employed as a computer component" at MPEP 2106.IV.B(1)). However, the

program/algorithm itself merely manipulates data or an abstract idea, or merely solves a

mathematical problem without a limitation to a practical application in the technological arts.

MPEP 2106.IV.B.2(a) (Statutory Product Claims).

Note: To overcome the rejection, it is suggested to the applicant to amend the claim 18 to be written in terms of "computer readable medium encoded with computer program".

Double Patenting

5.   The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225

USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6.   Claims 1, 7-16 and 18 are provisionally rejected on the ground of nonstatutory

obviousness-type double patenting as being unpatentable over claims 1, 5-6, 8, 10-14, & 16-19

of copending Application No. 2004/133368 A1. Although the conflicting claims are not

identical, they are not patentably distinct from each other because of following:

- For claim 1, 7-16 and 18, the claims 1, 5-6, 8, 10-14, & 16-19 of copending Application

discloses a system for performing a switch-over (see claim 1, line 2 of copending Application) in

data communication in accordance with a protection switching data communication principles,

characterized in that the system comprises a configurable integrated circuit of a unit of the data

communication for signaling a need for the switch-over (see claim 1, lines 1-2 of copending

Application) in real time based data communication (see claim 1, line 8 of copending

Application) to a configurable integrated circuit of a protecting pair unit of said unit of the data

communication (see claim 10, lines 1-3 of copending Application); wherein the real time based

data communication presumes the switch-over to take place in less than 50 milliseconds from an

occurrence of a connection fault (see claim 5, lines 2-3 of copending Application); wherein the

data communication comprises at least one of Internet Protocol, Ethernet, and MPLS for real

time telecommunication services (see claim 8, lines 1-4 of copending Application); wherein

Multiprotocol Label Switching is contained as a bearer for the data communication (see claim

11, lines 1-3 of copending Application); wherein Multiprotocol Label Switching operates as a

backbone for IP based data communication (see claim 12, lines 1-3 of copending Application);

wherein the real time based data communication is such that human senses any application based

on the real time based data communication substantially immediate (see claim 13, lines 1-4 of

copending Application); wherein the data communication takes place between a source

computing entity and a sink computing entity (see claim 14, lines 1-3 of copending Application).

For claims 1, 7-16 and 18, Applicant's claims merely broaden the scope of copending

Application No. 2004/133368 claims 1, 5-6, 8, 10-14, and 16-19 by eliminating the terms "an

interval for sending connectivity verification data information" from claim 1 (same as claims 16-

19) of the copending Application. It has been held that the omission of an element and its

function is an obvious expedient if the remaining elements perform the same function as before.

In re karlson, 136 USPQ 184 (CCPA). Also note Ex Parte Raine, 168 USPQ 375 (bd. App.

1969); omission of a reference element whose function is not need would be obvious to one

skilled in the art.

This is a _provisional_ obviousness-type double patenting rejection because the conflicting

claims have not in fact been patented.

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8.   Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Shabtay et al. (U.S. Patent No. 7093027 B1).

NOTE: the term " adapted to" recited in claim 14 is not positively recited claim limitations. Therefor the limitation following the term is not considered the claimed limitation. It is suggested applicant to remove the term. See MPEP 2111.04

- With respect to claims 1, 13-15 and 18, Shabtay teaches a system for performing a switch-over in data communication (e.g. fast protection mechanism in Fig. 3) in accordance with a protection switching data communication principles (e.g. the system in Fig. 3 for protection data communication), characterized in that the system comprises a configurable integrated circuit (e.g. edge switch 20 has block 30 in Fig. 1) of a unit of the data communication for signaling a need (e.g. the signal to determine the health of the path see col. 10, lines 56-63) for the switch-over in real time (col. 12, lines 21-22 and col. 2, lines 54-57) based data communication to a configurable integrated circuit of a protecting pair unit (e.g. Edge switch B in Fig. 1; and Fig. 3) of said unit of the data communication.

- With respect to claim 2, Shabtay teaches wherein the system provides the signaling

between the units without a participation of CPU (e.g. the switch 30 implement as a network

processor or FPGAs or ASIC to switch the data from user 22 to network port 24 in Fig. 1).

- With respect to claim 3, Shabtay also teaches wherein the configurable integrated circuit

comprises at least one of application-specific integrated circuit (ASIC) and field-programmable

gate array (FPGA) (e.g. col. 10, line 11).

- With respect to claim 4, Shabtay further teaches wherein the protection switching

comprises a protected LSP based on a working connection and a protecting connection (see col.

8, lines 47-56; col. 9, lines 19-21).

- With respect to claim 5, Shabtay discloses wherein said unit comprises a working unit

in accordance with a LSP working connection and the protection pair unit comprises a protection

unit in accordance with a LSP protection connection (e.g. the fault link between Edge switch A

and B would consider as working unit and Edge C as protection unit in Fig. 3).

- With respect to claim 6, Shabtay teaches wherein the signal comprises a protection

message for delivering that the data communication of a receiving unit is at least one of faulty

and unfaulty (e.g. col. 10, lines 58-62, col. 11, lines 15-25).

- With respect to claim 7, Shabtay teaches wherein the real time based data

communication presumes the switch-over to take place in less than 50 milliseconds from an

occurrence of a connection fault (e.g. col. 12, lines 21-22; col. 4, line 51).

- With respect to claim 8, Shabtay also teaches wherein the data communication

comprises at least one of Internet Protocol, Ethernet, and MPLS for real time telecommunication

services (e.g. col. 4, line 53).

- With respect to claim 9, Shabtay further teaches wherein Multiprotocol Label Switching is contained as a bearer for the data communication (e.g. col. 1, lines 25-45).

- With respect to claim 10, Shabtay teaches wherein Multiprotocol Label Switching operates as a backbone for IP based data communication (e.g. col. 1, lines 26-28).

- With respect to claim 11, Shabtay also teaches wherein the real time based data communication is such that human senses any application based on the real time based data communication substantially immediate (e.g. the fast local protection as sub 50 ms teaches in col. 4, line 51).

- With respect to claim 12, Shabtay teaches wherein the data communication takes place between a source computing entity and a sink computing entity (e.g. the Edge switch in Fig. 3).

- With respect to claim 16, Shabtay teaches before the step of signaling the step of detecting a connection fault in the data communication at the unit (e.g. the Hello message to monitor the health of the path col. 10, lines 58-60).

- With respect to claim 17, Shabtay teaches the step of receiving the need at the protecting pair unit and performing the switch over by activating the data communication on the protecting pair unit (e.g. the Edge switch B switchover to Edge switch C as Fig. 3 shows).

Conclusion

9.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Johansson et al. (Pub. No. 2004/0133368) discloses method, system, and network entity for detecting a connection fault.

Morita et al. (Pub. No. 2003/0076857) discloses transmitter, SONET/SDH transmitter, and transmission system.

Shabtay et al. (Patent No. 7197008) discloses end-to-end notification of local protection using OAM protocol.

10.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHI PHAM can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Art Unit 2616

P.t
4/10/07